

EXECUTIVE SUMMARY OF THE REPORT TO THE PRESIDENT

Supporting the U.S. Public Health Workforce

Executive Office of the President President's Council of Advisors on Science and Technology

May 2023



EXECUTIVE OFFICE OF THE PRESIDENT PRESIDENT'S COUNCIL OF ADVISORS ON SCIENCE AND TECHNOLOGY WASHINGTON, D.C. 20502

President Joseph R. Biden, Jr. The White House Washington, D.C.

Dear Mr. President,

All Americans should have abundant opportunities for a healthy life — to achieve aspirations for family, education, work, and more. None of these aspirations are possible unless we can function to our greatest potential, and we cannot reach our potential without health. More than ever before, our nation's health and economic stability rely on an effective public health system. Building a stronger, more efficient, and more equitable public health system is necessary to realizing a healthier, fairer, and more prosperous America. But creating this public health system will remain a dream without the people — the workforce — to support these efforts.

Public health saves lives. American public health improvements have been associated with generational gains in the health of our citizens. For example, administering vaccines and improving sanitation have reduced the spread of infectious diseases; placing restrictions on smoking has reduced heart disease and cancer; fortifying foods with folate has prevented birth defects; removing lead from gasoline has improved our air quality and reduced lead poisoning in children; and requiring the use of seatbelts and helmets has reduced deaths and injuries. Between the 1800s and the early years of the 21st century, U.S. life expectancy more than doubled.

On the other hand, negative shocks to public health have been associated with declines in life expectancy, including the 1918 flu pandemic, when life expectancy fell by 11 years. Alarmingly, CDC recently reported that all life expectancy gains made since 1996 have been erased, with an overall decrease to 76.1 years at birth in 2021.¹ This is 2.8 years below the peak reached in 2014, and represents the most significant decrease in life expectancy in the past century. As of December 2022, the per capita death rate from COVID-19 in the United States was notably worse than that of nations such as Germany, Canada, Costa Rica, and Japan.² Moreover, the death toll of over one million Americans has contributed to an estimated \$3.57 trillion in economic losses.³ Even before the emergence of COVID-19, and despite having the highest annual rate of per capita health expenditures when compared with other developed and many developing countries, the United States ranked 40th in life expectancy and is likely to sink further down the list when global statistics are updated again.⁴ Inequities in health outcomes across racial, ethnic, and socioeconomic groups are major drivers of our nation's poor health rankings when compared with peer nations. American Indian/Alaskan

¹ Arias, E., Tejada-Vera B., Kochanek, K. D., & Ahmad, F. B. (2022). Provisional Life Expectancy Estimates for 2021. CDC. https://www.cdc.gov/nchs/data/vsrr/vsrr023.pdf

² Johns Hopkins University. (2021 March 10). Mortality Analyses. https://coronavirus.jhu.edu/data/mortality

³ Beck, A. J. (2018). The Public Health Workforce: Revisions and Recommendations for Implementation. *Journal of Public Health Management and Practice*. 24(5): p E1-E11

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5932291/

⁴ World Health Organization. (n.d.). Life expectancy at birth (years). https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-(years).

Native, Black, and Hispanic populations have been affected disparately by these declines in health status.5,6

There is much work to do. As 2023 begins, we have relied on our public health workers to navigate three years of the COVID-19 pandemic, manage an outbreak of monkeypox, and face a winter triple threat of COVID, influenza, and RSV, all against a backdrop of continued increases in social and economic inequities in health outcomes. In the face of these challenges, your Administration, in partnership with Congress, has gone to great lengths to provide support and funding for public health. 7.8 The investments, most notably the \$7.4 billion commitment in May 2021 from the American Rescue Plan, include \$225 million to train community health workers and partial funding for CDC's "Strengthening U.S. Public Health Infrastructure, Workforce and Data Systems" grant in November 2022, are an excellent start toward regaining some ground in the near term.

Beyond the immediate need to bolster our public health infrastructure to meet the continuing demands brought on by the pandemic, we believe the nation's approach to health requires fundamental changes. These changes include a shift in focus from treatment to prevention and health promotion, greater attention to the uptake and widespread use of scientific discoveries to benefit people in underserved communities, and an increased emphasis on improving social determinants of health and advancing equity — an approach that meets Americans where they are, rather than waiting for them to seek help, and considers all of the factors that shape their opportunities to be healthy. For while the United States has long been highly innovative in health research and development — including preventative practices, treatment protocols, pharmaceuticals, and medical devices — many Americans do not benefit from the fruits of this scientific and technological "hardware" due to long-standing inequities in access to education and employment opportunities, healthy living conditions, and health care. Our nation's world-leading health "hardware" will continue to be out of reach for too many of our fellow citizens unless we invest in and improve our "software" — a public health workforce that can implement innovative, scientifically-informed best practices for reaching Americans in every community. A well-trained, diverse, inclusive, and resilient public health workforce is essential to transforming our nation's approach to public health.

This report focuses on how to sustain and strengthen our public health workforce for the long term, building on the lessons learned, partnerships created, and solutions advanced during the pandemic.

⁵ Kaiser Family Foundation. (2023 March 15). Key Data on Health and Health Care by Race and Ethnicity. https://www.kff.org/racial-equity-and-health-policy/report/key-facts-on-health-and-health-care-by-raceand-ethnicity

⁶ Mahajan, S. (2021). Trends in Differences in Health Status and Health Care Access and Affordability by Race and Ethnicity in the United States, 1999-2018. Journal of the America Medical Association. 326 (7):637-638 https://jamanetwork.com/journals/jama/fullarticle/2783069

⁷ The White House. (2022 September 30). Fact Sheet: Biden-Harris Administration Announces American Rescue Plan's Historic Investments in Community Health Workforce. https://www.whitehouse.gov/briefingroom/statements-releases/2022/09/30/fact-sheet-biden-harris-administration-announces-americanrescue-plans-historic-investments-in-community-health-workforce/

⁸ The White House. (2022 September 1). Fact Sheet: American Pandemic Preparedness Plan Annual Report. https://www.whitehouse.gov/ostp/news-updates/2022/09/01/fact-sheet-american-pandemicpreparedness-plan-annual-report/

Our recommendations fall into three major categories: 1) establishing a common lexicon and standardized system for enumerating the public health workforce; 2) accelerating effective recruitment/retention and strengthening public health talent; and 3) advancing health equity by ensuring that the U.S. has a robust community health workforce and prioritizing capacity-building for community engagement.

Mr. President, we have a once in a generation opportunity to build a public health system that can realize a vision of equity. We cannot go back to the way things were before the COVID-19 pandemic. We must seize this moment to make long-needed permanent improvements to public health in America, including building a robust, well-trained, well-compensated public health workforce that is trusted by the communities they serve. Like you, we believe in people. And we are confident that people are the heart and soul of an effective public health system.

Sincerely,

The President's Council of Advisors on Science and Technology

Executive Summary

The field of public health is remarkable in the sense that it has no boundaries. Public health finds its way into all of our lives. Yet what the public discovered during the COVID-19 pandemic is a truth that had long been known to many in the public health field: while our public health system has delivered great value in the past, it has been failing for decades. As we considered what is needed to rebuild our public health system into one that is worthy of the American people, PCAST has been guided by a conviction that the public health system should allow the nation to realize the vision of health equity — defined by the Centers for Disease Control and Prevention (CDC) as, "when every person has a fair opportunity to 'attain his or her full health potential' and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances."

In choosing where to focus our attention, it was important to us to follow the lead of this Administration in first investing in the hardworking American people. Without public health workers — a workforce that includes health professionals, community health workers, data analysts, laboratory personnel, educators, environmental health officers, and more — the innovations in prevention and treatment developed by our world-leading health research and development will not reach all of the many millions of people who need care, particularly those Americans in marginalized groups and disadvantaged communities who have long suffered disproportionately poor health outcomes. The recommendations in this report establish clear, actionable goals to support current public health workers and ensure that, in the future, the nation has the robust, well-trained, well-resourced, and trusted workforce needed to lead and coordinate public health efforts; control epidemics; conduct disease and injury surveillance; collect vital statistics; ensure good medical and dental care for socially marginalized groups; monitor environmental safety; and provide health education and laboratory services to improve the health of Americans in every community

Recommendations

Establish a common lexicon and standardized classification system for the public health workforce

1) The Bureau of Labor Statistics (BLS) and Office of Management and Budget (OMB), in consultation with the Department of Health and Human Services (HHS, particularly CDC and HRSA), should work together to create a new Standard Occupational Classification (SOC) for public health, and include the public health workforce in key surveys of the labor market as part of the next revision of the SOC manual.

Establishing a common lexicon and standardized system is the necessary foundation that will enable enumeration of the current public health workforce, including identification of workforce gaps, through regular and systematic data collection. A standardized categorization and description of public health jobs will help guide resource allocation, recruitment and hiring, training or retraining of existing staff, and educational program development.

Expand recruitment, retention, training, and personnel exchanges to strengthen public health talent

2a) Create an all-of-government campaign to recruit and retain people in public health careers. This campaign should include direct hiring authority, the creation of a new job series for public health, and expansion of loan repayment and forgiveness options for public health workers.

To rebuild the nation's public health workforce post-pandemic, it is critical to attract both students and existing skilled health workers into the field. A focused, inspiring recruitment effort that publicizes the importance of public health jobs, coupled with incentives such as clear career pathways and loan repayment and forgiveness options will elevate public health employment as desirable and help to fill available jobs. Equally vital to this campaign is retaining the skilled and educated individuals that already work within the public sector, especially given this workforce had already declined over the 15 years preceding the pandemic. Committed investment in retaining seasoned employees ensures that local, state, and federal health departments cultivate long-serving, knowledgeable leaders.

2b) Establish new pathways and increase existing opportunities for personnel exchanges between federal, state, tribal, and territorial health officials, as well as support exchanges with local health systems and other private sector organizations.

In establishing new pathways for federal, state, tribal, and territorial health officials to have supportive exchanges with each other and with private sector organizations, agencies can step out of their current silos to develop new practices and collaborations. New and expanded pathways can also reinforce data alignment and help ensure that the public health workforce is prepared for future emergencies. These exchanges can both introduce new ideas to participating agencies and help them understand their partners across government and industry better. HHS leadership will be needed to ensure expansion and implementation of pathways for exchanges across the public health workforce.

Advance health equity through strengthening public health capacity for community engagement

3a) To develop and sustain a robust public health workforce that is deeply rooted in and trusted by their communities, the Departments of Education and Labor, in consultation with HHS and leveraging the updated occupational classification of "community health workers" from BLS,9 should develop sustainable and/or non-degree career pathways for these workers and ensure equitable workplaces that foster diversity and inclusion.

A public health workforce will only be effective if trusted by the communities served. Essential to that trust is the frontline role of Community Health Workers (CHWs). By supporting CHWs with strong ties to their local communities, state, local, tribal, and territorial health departments can establish relationships with communities across races, ethnicities, and cultures. Several temporary

⁹ Bureau of Labor Statistics. (n.d.). Occupational Employment and Wage Statistics. https://www.bls.gov/oes/current/oes211094.htm



programs established through recent funding elevate CHWs. These programs should receive technical assistance and be rigorously evaluated. These efforts should include a broader assessment of the compensation of CHWs, the development and dissemination of best practices for organizations that employ CHWs, and the provision of guidelines related to program evaluation and accountability for organizations seeking CHW funding. For programs determined to be effective, we recommend the development of mechanisms to sustain or expand them beyond the recent emergency.

3b) Expand a national community of practice focused on scientifically informed, community-engaged practices for health equity that includes public health agencies.

Optimal health for everyone is the primary purpose of a functional public health system. A national community of practice would fuel innovation and research related to health equity, promote development of a holistic approach to addressing social determinants of health, and enhance communication and coordination across public health agencies and other sectors. Such efforts should lead to improved programs and policies, transformed systems, more effective and equitable public health delivery, and thriving communities where every American has the opportunity to live a full and healthy life. This can be effectively accomplished by expanding upon existing HHS efforts.

Download the full report